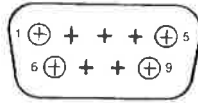


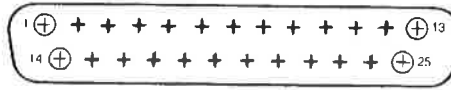
**Standard Density Plug Inserts**



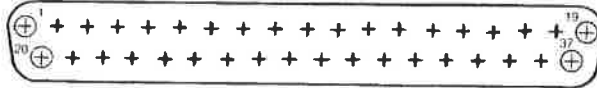
Shell Size E  
(9 Position)



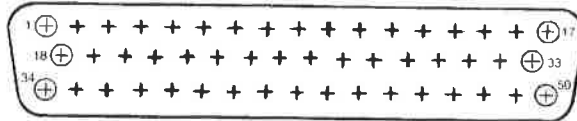
Shell Size A  
(15 Position)



Shell Size B  
(25 Position)



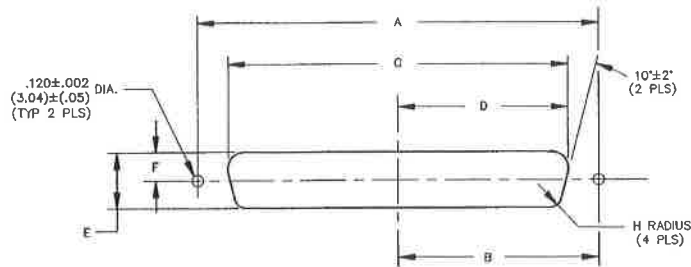
Shell Size C  
(37 Position)



Shell Size D  
(50 Position)

NOTE: Mating face of plug is shown; socket is mirror image.

**Panel Mounting Specifications**



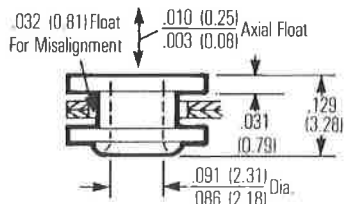
**Dimensions**

| Shell Size | Positions | Mounting Method |            | A    |       | B    |       | C    |       | D    |       | E    |       | F    |      | H    |      |
|------------|-----------|-----------------|------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|
|            |           | Front/          | Rear Panel | in   | mm    | in   | mm    | in   | mm    | in   | mm    | in   | mm    | in   | mm   | in   | mm   |
| E          | 9         | Front           |            | 0.98 | 24.89 | 0.49 | 12.45 | 0.87 | 22.10 | 0.44 | 11.18 | 0.51 | 12.95 | 0.26 | 6.60 | 0.08 | 2.03 |
|            |           | Rear            |            | 0.98 | 24.89 | 0.49 | 12.45 | 0.81 | 20.57 | 0.40 | 10.16 | 0.45 | 11.43 | 0.23 | 5.84 | 0.13 | 3.30 |
| A          | 15        | Front           |            | 1.31 | 33.27 | 0.66 | 16.76 | 1.10 | 27.94 | 0.60 | 15.24 | 0.51 | 12.95 | 0.26 | 6.60 | 0.08 | 2.03 |
|            |           | Rear            |            | 1.31 | 33.27 | 0.66 | 16.76 | 1.13 | 28.70 | 0.57 | 14.48 | 0.45 | 11.43 | 0.23 | 5.84 | 0.13 | 3.30 |
| B          | 25        | Front           |            | 1.85 | 46.99 | 0.93 | 23.62 | 1.74 | 44.20 | 0.87 | 22.10 | 0.51 | 12.95 | 0.26 | 6.60 | 0.08 | 2.03 |
|            |           | Rear            |            | 1.85 | 46.99 | 0.93 | 23.62 | 1.67 | 42.42 | 0.84 | 21.34 | 0.45 | 11.43 | 0.23 | 5.84 | 0.13 | 3.30 |
| C          | 37        | Front           |            | 2.50 | 63.50 | 1.25 | 31.75 | 2.39 | 60.71 | 1.20 | 30.48 | 0.51 | 12.95 | 0.26 | 6.60 | 0.08 | 2.03 |
|            |           | Rear            |            | 2.50 | 63.50 | 1.25 | 31.75 | 2.33 | 59.18 | 1.16 | 29.46 | 0.45 | 11.43 | 0.23 | 5.84 | 0.13 | 3.30 |
| D          | 50        | Front           |            | 2.41 | 61.21 | 1.20 | 30.48 | 2.30 | 58.42 | 1.15 | 29.21 | 0.62 | 15.75 | 0.31 | 6.60 | 0.08 | 2.03 |
|            |           | Rear            |            | 2.41 | 61.21 | 1.20 | 30.48 | 2.22 | 56.39 | 1.11 | 28.19 | 0.56 | 14.22 | 0.28 | 5.84 | 0.13 | 3.30 |

4

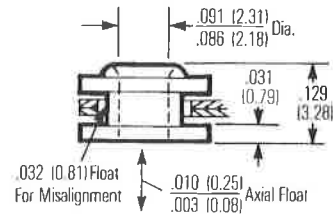
**PANEL MOUNTING HARDWARE: Aids in alignment of plug and receptacle.**

**Float Bushing**



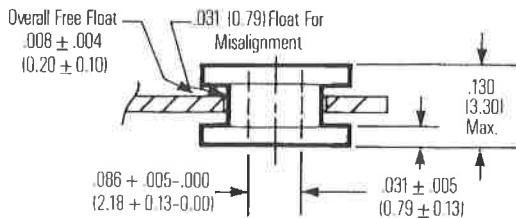
Rear panel mounting

**Reverse Float Bushing**



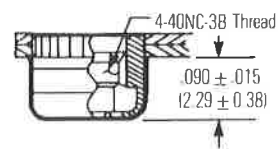
Front panel mounting

**Floating Dual Bushing**



Front and rear panel mounting

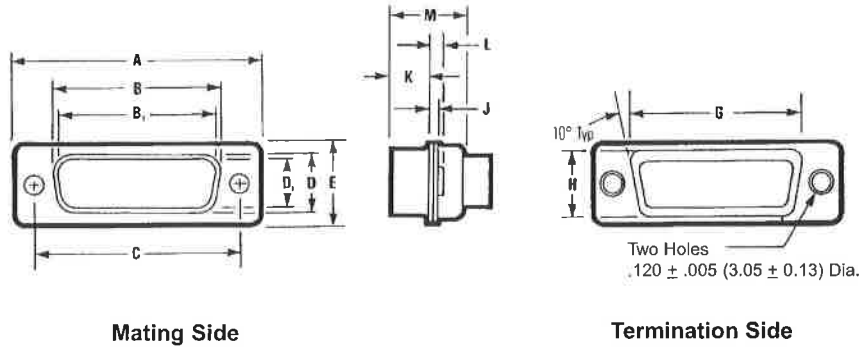
**4-40 Clinch Nut**



Rear panel mounting

# D-subminiature Connectors Information

## Introduction Shells and Mounts



Mating Side

Termination Side

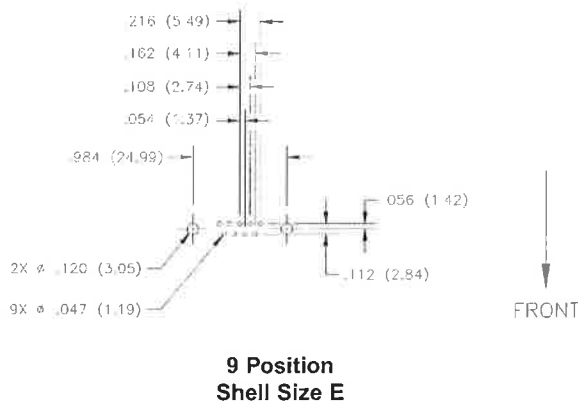
| Shell Size | Positions | Connector Type | A ±.015"<br>(0.38mm) |       | B ±.010"<br>(0.25mm) |       | B <sub>1</sub> ±.005"<br>(0.13 mm) |       | C ±.005"<br>(0.13mm) |       | D ±.010"<br>(0.25mm) |       | D <sub>1</sub> ±.010"<br>(0.25mm) |       | E ±.010"<br>(0.25mm) |       |
|------------|-----------|----------------|----------------------|-------|----------------------|-------|------------------------------------|-------|----------------------|-------|----------------------|-------|-----------------------------------|-------|----------------------|-------|
|            |           |                | in                   | mm    | in                   | mm    | in                                 | mm    | in                   | mm    | in                   | mm    | in                                | mm    | in                   | mm    |
| E          | 9         | Plug           | 1.213                | 30.81 | --                   | --    | .666                               | 16.90 | 0.984                | 24.99 | --                   | --    | .329                              | 8.40  | .494                 | 12.55 |
|            |           | Socket         | 1.213                | 30.81 | .640                 | 16.26 | --                                 | --    | 0.984                | 24.99 | .308                 | 7.82  | --                                | --    | .494                 | 12.55 |
| A          | 15        | Plug           | 1.541                | 39.14 | --                   | --    | .994                               | 25.30 | 1.312                | 33.32 | --                   | --    | .329                              | 8.40  | .494                 | 12.55 |
|            |           | Socket         | 1.541                | 39.14 | .968                 | 24.59 | --                                 | --    | 1.312                | 33.32 | .308                 | 7.82  | --                                | --    | .494                 | 12.55 |
| B          | 25        | Plug           | 2.088                | 53.04 | --                   | --    | 1.534                              | 39.00 | 1.852                | 47.04 | --                   | --    | .329                              | 8.40  | .494                 | 12.55 |
|            |           | Socket         | 2.088                | 53.04 | 1.508                | 38.30 | --                                 | --    | 1.852                | 47.04 | .308                 | 7.82  | --                                | --    | .494                 | 12.55 |
| C          | 37        | Plug           | 2.729                | 69.32 | --                   | --    | 2.182                              | 55.40 | 2.500                | 63.50 | --                   | --    | .329                              | 8.40  | .494                 | 12.55 |
|            |           | Socket         | 2.729                | 69.32 | 2.156                | 54.76 | --                                 | --    | 2.500                | 63.50 | .308                 | 7.82  | --                                | --    | .494                 | 12.55 |
| D          | 50        | Plug           | 2.635                | 66.93 | --                   | --    | 2.079                              | 52.80 | 2.406                | 61.11 | --                   | --    | .436                              | 11.07 | .605                 | 15.37 |
|            |           | Socket         | 2.635                | 66.93 | 2.062                | 52.34 | --                                 | --    | 2.406                | 61.11 | .420                 | 10.67 | --                                | --    | .605                 | 15.37 |

| Shell Size | Positions | Connector Type | G ±.010"<br>(0.25mm) |       | H ±.010"<br>(0.25mm) |       | J ±.010"<br>(0.25 mm) |      | K ±.005"<br>(0.25mm) |      | L ±.010"<br>(0.25mm) |      | M ±.010"<br>(0.25mm) |       |
|------------|-----------|----------------|----------------------|-------|----------------------|-------|-----------------------|------|----------------------|------|----------------------|------|----------------------|-------|
|            |           |                | in                   | mm    | in                   | mm    | in                    | mm   | in                   | mm   | in                   | mm   | in                   | mm    |
| E          | 9         | Plug           | .759                 | 19.28 | .422                 | 10.72 | .030                  | 0.76 | .236                 | 5.99 | .045                 | 1.14 | .422                 | 10.72 |
|            |           | Socket         | .759                 | 19.28 | .422                 | 10.72 | .030                  | 0.76 | .243                 | 6.17 | .045                 | 1.14 | .429                 | 10.92 |
| A          | 15        | Plug           | 1.083                | 27.51 | .422                 | 10.72 | .030                  | 0.76 | .236                 | 5.99 | .045                 | 1.14 | .422                 | 10.72 |
|            |           | Socket         | 1.083                | 27.51 | .422                 | 10.72 | .030                  | 0.76 | .253                 | 6.17 | .045                 | 1.14 | .429                 | 10.92 |
| B          | 25        | Plug           | 1.625                | 41.27 | .422                 | 10.72 | .039                  | 0.99 | .231                 | 5.87 | .060                 | 1.52 | .426                 | 10.82 |
|            |           | Socket         | 1.625                | 41.27 | .422                 | 10.72 | .030                  | 0.76 | .243                 | 6.17 | .045                 | 1.14 | .429                 | 10.92 |
| C          | 37        | Plug           | 2.272                | 57.71 | .422                 | 10.72 | .039                  | 0.99 | .231                 | 5.87 | .060                 | 1.52 | .426                 | 10.82 |
|            |           | Socket         | 2.272                | 57.71 | .422                 | 10.72 | .030                  | 0.76 | .243                 | 6.17 | .045                 | 1.14 | .429                 | 10.92 |
| D          | 50        | Plug           | 2.178                | 55.32 | .534                 | 13.56 | .039                  | 0.99 | .231                 | 5.87 | .060                 | 1.52 | .426                 | 10.82 |
|            |           | Socket         | 2.178                | 55.32 | .534                 | 13.56 | .030                  | 0.76 | .243                 | 6.17 | .045                 | 1.14 | .429                 | 10.92 |

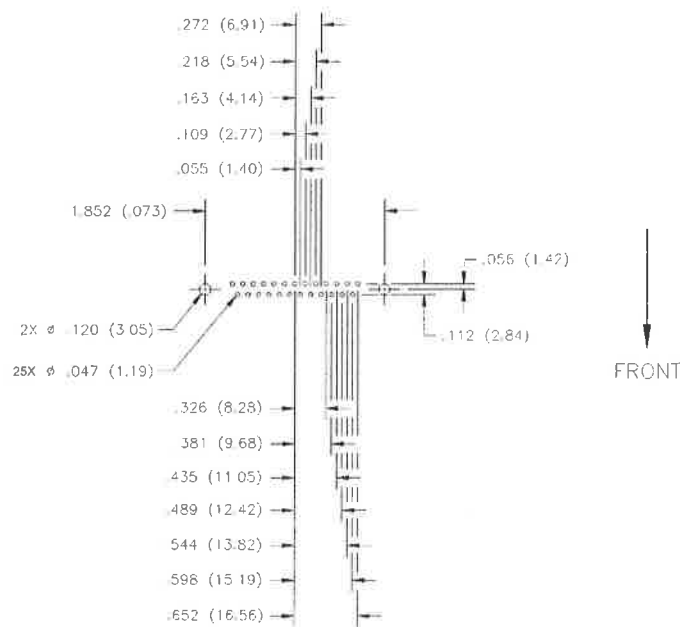
B and D are outside dimensions for socket. D and B are inside dimensions for plug.

4

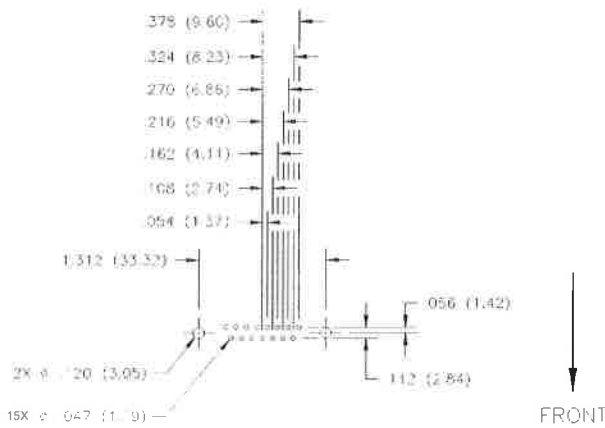
**Standard Density D-subminiature  
Mounting Dimensions Board Layouts  
Footprints (Component side shown)**



**9 Position  
Shell Size E**



**25 Position  
Shell Size B**



**15 Position  
Shell Size A**

**4**

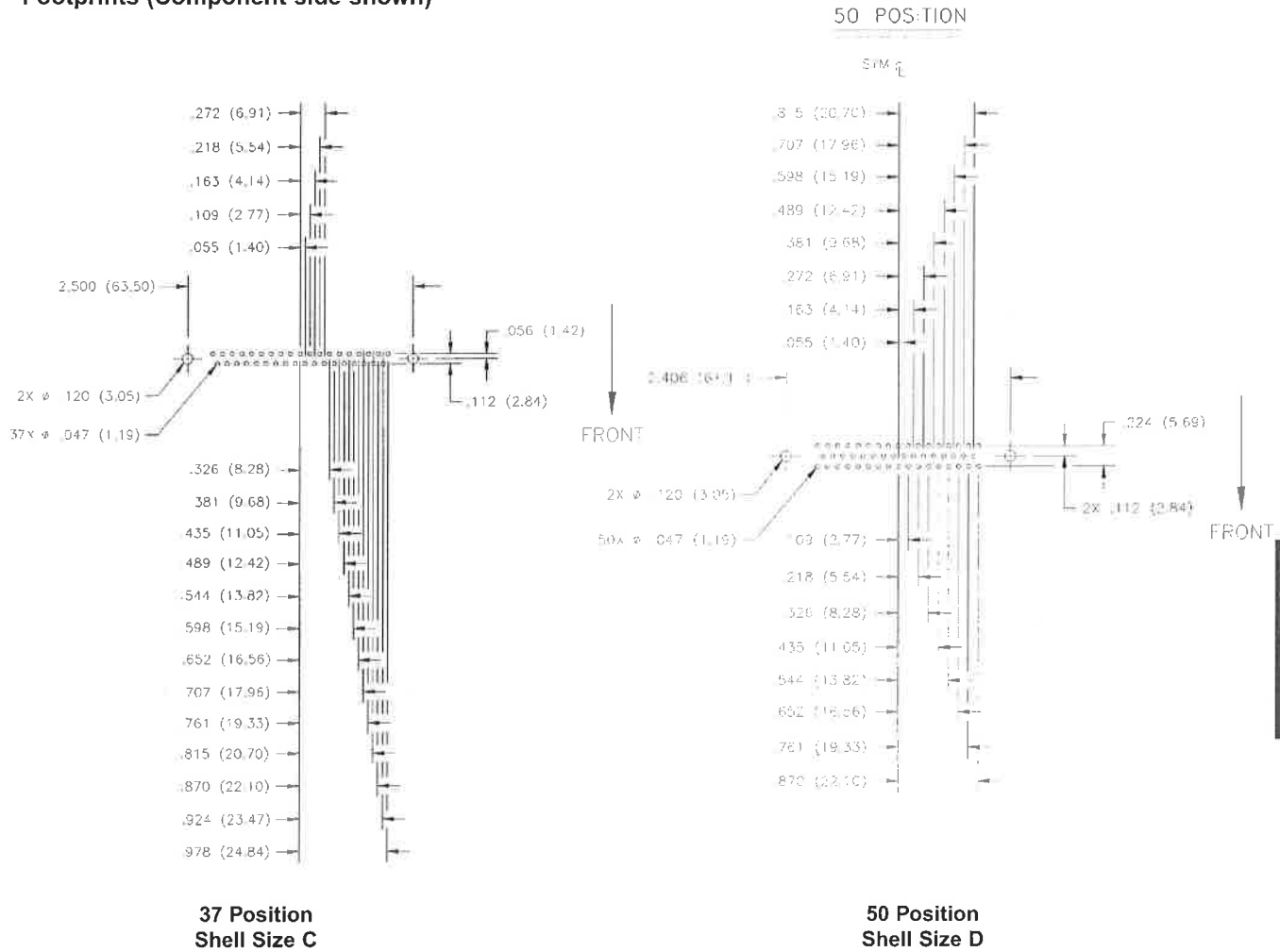
The footprints on this page are standard for all metal shell D-subminiature connectors.

On all right-angle D-subminiature connectors, the short row of contacts is positioned closest to the edge of the board.

**PC Board Lead Hole Size**

| Terminal Dia. |           | Hole Dia. |      |
|---------------|-----------|-----------|------|
| in            | mm        | in        | mm   |
| .040          | 1.02      | .055      | 1.40 |
| .030          | 0.76      | .045      | 1.14 |
| .024-.025     | 0.61-0.64 | .039      | 0.99 |

**Standard Density D-subminiature  
Mounting Dimensions Board Layouts  
Footprints (Component side shown)**



The footprints on this page are standard for all metal shell D-subminiature connectors.

On all right-angle D-subminiature connectors, the short row of contacts is positioned closest to the edge of the board.

**PC Board Lead Hole Size**

| Terminal Dia. |           | Hole Dia. |      |
|---------------|-----------|-----------|------|
| in            | mm        | in        | mm   |
| .040          | 1.02      | .055      | 1.40 |
| .030          | 0.76      | .045      | 1.14 |
| .024-.025     | 0.61-0.64 | .039      | 0.99 |